SARL NEWS SUNDAY 17 March 2013

You are listening to ZS6SRL, the official radio station of the South African Radio League, the national body for amateur radio in South Africa. The SARL broadcasts a news bulletin every Sunday at 08:15 CAT in Afrikaans and at 08:30 CAT in English. To listen to a web stream, visit www.sarl.org.za, click on 'Amateur Radio Today' and follow the links for details. For audio via Echolink, connect to ZS0JPL-R.

You can download this bulletin and previous ones from www.sarl.org.za and also subscribe there to receive future bulletins by e-mail.

Your newsreader this morning is (name and call sign), on 145,725 from Pretoria, with relays on 7,066 MHz and 3,695 MHz SSB. (Other news readers change to suit).

SILENT KEYS

It is with regret that we have to announce that the keys of two radio amateurs went silent recently, they are:

Trevor Holmes, ZS2AZR, on Tuesday 12 Marchy. Trevor was a member of the South Cape Amateur Radio Club. Trevor leaves his wife Adelaide behind.

Bill Ingleson, ZS6KO, at 85 years of age, at on Friday 15 March 2013. Bill joined the SARL and the Pretoria Amateur Radio Club in 1946 and was an ex-chairman and active member of PARC until quite recently. Bill was also a very enthusiastic CW, QRP operator. Bill leaves his daughter Lynette and his son-in-law Steven, with whom he lived the last couple of years.

Our sincerest condolences to the relatives and friends of the deceased.

(PAUSE)

IN THE NEWS TODAY:

DID YOU KNOW THAT AMATEUR RADIO PLAYED A ROLE IN ENDING THE CIVIL WAR IN MOZAMBIQUE?

FREQUENCY CHANGE FOR AMATEUR RADIO TODAY ON MARCH $31\,$

BOB BRUNINGA, WB4APR, TAKES APRS UNDERGROUND

You are listening to ZS6SRL. Stay tuned for more details on these and other important and interesting items.

DID YOU KNOW THAT AMATEUR RADIO PLAYED A ROLE IN ENDING THE CIVIL WAR IN MOZAMBIQUE?

Hear this fascinating story from the guest speaker, Dr Antony Turton, ZS6CST at the annual Awards dinner. The dinner is held as part of the 2013 SARL National Convention which will be hosted on the West Rand by the West Rand Amateur Radio Club on 26 and 27 April.

To stem the flow of weapons from Mozambique into KwaZulu-Natal, a two-man special operations team was inserted into Mozambique for this mission. One of those two persons was Anthony Turton, selected in part because of his skills as a radio operator, which was deemed to be a necessary element for the success of this high risk but strategically important mission. Anthony used these skills, honed to a high level of technical competence as an active radio amateur, to gain strategic access to the rebel group RENAMO.

Make your booking for the annual dinner now. Tony, as he is also known, has authored the book "Shaking Hands with Billy' which tells this story for the first time. The book will be available at a special price at the National Convention. To book follow the links from the SARL home page on www.sarl.org.za.

This is also a reminder that the visit to SANSA at Hartbeeshoek earth station is limited to 45 persons. Make your reservation now to avoid disappointment. When booking ensure that you submit your ID number.

FREQUENCY CHANGE FOR AMATEUR RADIO TODAY ON MARCH 31

On 31 March some of the frequencies on which the SARL's programme is transmitted will change. Here is the complete HF transmit schedule.

Sundays 10:00 - 11:00 local time for Southern Africa the frequency will remain the same on 7 025 kHz, however for East and Central Africa listeners the frequency will change to 17 570 kHz. For our listeners outside South Africa local time translates to 08:00 - 09:00 UTC. On Mondays the programme is repeated at 16:30 UTC, 18:30 local time in South Africa, on a new frequency of 3 230 kHz. For more information about podcasts and other relays and retransmissions visit www.sarl.org.za and select Amateur Radio Today from the menu. From the web pages you can also download the programme in a high and low res format for retransmission on local repeaters or for your own listening pleasure.

Reception reports, comments and suggestions are always invited. Send an email to artoday@sarl.org.za.

BOB BRUNINGA, WB4APR, TAKES APRS UNDERGROUND

Bob Bruninga, WB4APR, led a group of radio amateurs earlier this month to Mammoth Cave, the world's longest known cave system, in Kentucky, USA to test how the Automatic Packet Reporting System (APRS) can be used as a means to extend radio communications underground. When used underground, VHF and UHF radios can only work over a short distance of each other and only when in the line of sight of another radio. This makes routine use of these radios of little value when underground; however, when APRS radios act as packet digipeaters, the coverage can be dramatically extended. Bruninga, a senior research engineer at the US Naval Academy, developed APRS as a global, on-air protocol for supporting handheld position reporting and text messaging via VHF radio.

Bruninga's team used 14 APRS radios to establish a network that provided

real-time position and text message communications along a route nearly 1 600 metres long in the cave. "Cavers carried a cave map that had a latitude and longitude grid so that they could know their exact coordinates when manually entering their position into their handheld transceivers," Bruninga said. "Texting via APRS provided communications end-to-end, and even included email into the topside global APRS system." The team set up the APRS network in what Bruninga called "large subway-sized cave passages" that were 30-50 feet wide and 10-20 feet tall.

He said that extending the communications system along the cave was easy: "We would walk until we lost the signal, then back up 5 - 10 metres and set a digipeating APRS handheld transceiver on a rock and then kept going, repeating the process.

After going over the data from the cave test, Bruninga found two interesting facts: Even with the average link between each radio at 150 metres, UHF outperformed VHF by about 13 percent. In addition, power did not make much of a difference, with the APRS-compatible handheld transceivers performing as well as several portable 10 W mobile radios.

Bruninga said that APRS radios bring "a new range multiplier dimension to in-cave communication. In the past, a paltry few-hundred metres VHF/UHF radio range has not been impressive to cavers, but now with APRS, they can be linked up to 14 times in series, demonstrating some real potential for amateur radio caving support. This is especially true when some of those few-hundred foot distances may take an hour or more to crawl, whereas APRS can get the message through at the speed of light."

CLUB AFFILIATION

This week the SARL welcomes the Secunda Amateur Radio Club as an affiliate to the league. Secunda Amateur Radio Club actively supports Hamnet and takes part in HF competitions.

YOUTH AND RADIO

The Thaba Voortrekker camp is held annually during the first school holiday of the year north of Rustenburg as has been done for more than a decade.

During the camp radio speech, radio operating and electronics, based on the RAE course, will be presented to the young campers in order for them to obtain the relevant badges. The children are encouraged to complete the course for the radioamateur badge after the camp, which includes the ZU examination.

During the camp the training call sign of the Voortrekkers, ZS6VTS, will be used. ZS6VTS will be on the air daily between 16:00 and 19:00. The Rustenburg, Magalies, PTA and Centurion repeaters can be accessed from the camp. The station will also be active on the 80, 40, 20, 15 en 10 m bands. A bulletin will be transmitted every evening shortly before 19;00. Please listen out for ZS6VTS and speak to the children from 20 to 26 March.

FOUNDING OF A WILDERNESS SEARCH & RESCUE ORGANISATION FOR THE EASTERN CAPE

All interested radio amateurs en specifically members of Hamnet are invited to attend the inaugural meeting of a wilderness search & rescue organisation for the Eastern Cape on Monday 18 March 2013 at 18:30. The meeting will be at the Nelson Mandela Ambulance Station in Lindsay Street, Xorsten, Port Elizabeth. The ambulance station is opposite the Livingstone Hospital. Should you require more information please do not hesitate to contact the SARL councillor ZS1JM, Johann Marais, on 082 77 1880.

WEST RAND FLEA MARKET

The West Rand Amateur Radio Club is hosting its next flea market 12:00 on Saturday 30 March 2013 at their clubhouse in Kroton street, Weltevredenpark, Roodepoort. Everybody is welcome. For more information contact Phillip, ZS6PVT, 083 267 3835 or Geoff, ZS6GRL, 082 546 5546.

PROPAGATION REPORT

Hannes Coetzee, ZS6BZP, reports that the solar activity is expected to continue at low levels but there is a good chance that it may pick up in the near future. There remains a chance for M-class Solar flares.

If you want to do your own frequency predictions, the expected effective sunspot number for the week will be around 64.

All the bands from 20 to 10 m will provide lots of DX fun with 15 m providing the best openings with 20 m not far behind. There will also be 10 m openings on sunlit paths in the afternoons.

Please visit www.spaceweather.co.za for further information.

DIARY OF EVENTS

17 March - SARL VHF/UHF analogue and digital contest closes at 10:00 UTC today. 18 March - Founding meeting for a wilderness search & rescue organisation for the Eastern Cape. 20 to 26 March Voortrekker camp station ZS6VTS on the air. 30 March - West Rand Amateur Radio Club flea market starting 12:00. For more information contact Phillip, ZS6PVT, at 083 267 3835 or Geoff, ZS6GRL, at 082 546 5546.

SARL News invites clubs and individuals to submit news items of interest to radio amateurs and short-wave listeners. Submit news items - if possible in both English and Afrikaans to www.sarl.org.za/newsinbox.asp, not later than the Thursday preceding the bulletin date.

The SARL also invites you to listen to Amateur Radio Today every Sunday morning at 10:00 CAT on 145,750 MHz in the Pretoria area, with relays on 7 082, 7 205 and 17 760 kHz. There is also a podcast by ZS6RO. For a webstream and Echolink by ZS6FCS, visit www.sarl.org.za, click on 'Amateur Radio Today', go down the green column and click on 'LISTEN ON THE WEB'. A

repeat transmission can be heard on Mondays at $18:30~\mathrm{UTC}$ on $4.895~\mathrm{kHz}$ ((A new time and frequency!). Reception reports are invited. We are particularly interested in reports of the $4.895~\mathrm{kHz}$ transmission on Mondays at $16:30~\mathrm{UTC}$ as the frequency is close to the proposed new amateur allocation near $5~\mathrm{MHz}$. Reception reports from all areas in South Africa would be useful in our bid to ICASA for frequencies pilot studies. Send reports to artoday@sarl.org.za.

Sentech sponsors the transmissions on the non-amateur frequencies.

You have listened to a bulletin of the South African Radio League compiled and edited by George Honiball, ZS6NE.

Thank you for listening, 73.

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